

REMARKS

Claim Status

Claims 1, 3-14, 18-26 and 29-31 are cancelled. Claims 1, 18-20 and 31 are currently cancelled.

Claims 27, 28, 32 and 33 are withdrawn. Claims 27 and 28 were withdrawn in the August 21, 2007 Response. All the withdrawn claims should be considered for rejoinder upon finding the pending composition claims allowable, since they incorporate all the limitations of the elected invention (group 21) as claimed.

Claims 2, 15-17 and 27 are currently amended. For the most part, the claims are amended for purposes of antecedent basis and clarity. The original specification provides ample written support for all the changes.

Claims 32 and 33 are new. Written support for these claims is in paragraphs 9 and 28 of the original specification, for example.

Applicants respectfully submit that the foregoing amendments do not introduce any new subject matter to the application. With the present amendments, there are eight claims pending, namely claims 2, 15-17, 27, 28, 32 and 33.

Claim Rejections – 35 USC § 112, first paragraph (Written Description)

Claims 1, 15-20 and 31 stand rejected under 35 USC § 112, second paragraph, as being indefinite for the following reasons.

In the first part of the rejection, the Examiner alleges that certain language in claim 1 regarding peptide function is unclear. This rejection is moot given that claim 1 is cancelled.

The Examiner alleges in the second part of the rejection that claim 15 recites subject matter (a peptide comprising SEQ ID NO:30) that does not have antecedent basis in claim 2. In

its currently amended form, claim 15 recites verbatim a peptide as listed in part a) of claim 2. Hence, claim 15 has complete antecedent basis in claim 2.

Finally, the Examiner rejects claim 31 for reciting subject matter (a peptide consisting of SEQ ID NO:30) that does not have antecedent basis in claim 2. This rejection is moot given that claim 31 is cancelled.

Claim Rejections – 35 USC § 112, first paragraph (Written Description)

Claims 1 and 2 stand rejected under 35 USC § 112, first paragraph, as lacking written description in the specification. In lodging this rejection, the Examiner states on page 6 of the Office Action that

[in] order to claim SEQ ID NO: 30 as broadly as possible (homologs, functional equivalents, fragments, single substitutions, deletions, D-isomers, various types of bonds, etc.), Applicant must adequately demonstrate possession of a representative number of species of the large genus claimed.

The claims as currently amended do not recite SEQ ID NO:30 fragments, homologues, or versions thereof containing non-peptide bonds or D-amino acids. In view of the above remarks and amendments, Applicants respectfully submit that the pending claims have written support in the specification. This rejection is therefore overcome.

Claim Rejections – 35 USC § 102(b)

Claims 1, 2, 15, 16 and 20 stand rejected under 35 USC § 102(b) as lacking novelty over Srivastava et al. (U.S. Patent No. 6,117,640). The Examiner asserts that Srivastava discloses a peptide that comprises SEQ ID NO:30.

The claims as currently amended do not read on any of the sequences taught in the Srivastava reference. The alleged prior art peptide (SEQ ID NO:2 in Srivastava) is 271 amino acids in length; however, the pending claims read on a peptide (SEQ ID NO:30) that is 42 amino

acids in length. Furthermore, Srivastava does not suggest the provision of this particular sequence as set forth in the pending claims. In view of the above remarks and amendments, Applicants respectfully submit that the pending claims are novel. This rejection is therefore overcome.

Objections to the Specification

Two different objections are leveled against the specification in the Office Action. The Examiner implies in the first objection that the specification does not reference parent application PCT/US03/35666. Applicants kindly point out that the specification's priority statement was amended to this effect in the Preliminary Amendment and Priority Notice filed on April 22, 2005. Therefore, Applicants respectfully request that this objection be withdrawn.

In the second objection, the Examiner states that sequence number identifiers should be incorporated in the Brief Description of the Drawings section of the application for Figures 1, 3 and 5. Each of these figures discloses certain amino acid sequences that are not assigned identification numbers.

As listed in the above amendment, the specification now refers to the sequences depicted in Figures 1, 3 and 5 with identification numbers as follows:

Figure 1A	TBEV E (aligned)	SEQ ID NO:66
	HCV E1 (aligned)	SEQ ID NO:67
	CSFV E2 (aligned)	SEQ ID NO:68
	HCV E1 (non-aligned)	SEQ ID NO:69
	HCV E2 (non-aligned)	SEQ ID NO:70
	HCV E2 (aligned)	SEQ ID NO:71
Figure 3	TBEV prM	SEQ ID NO:72
	CSFV E1	SEQ ID NO:73
Figure 5	HIV-1 TM	SEQ ID NO:74
	HCV E1	SEQ ID NO:75

A substitute Sequence Listing (paper and electronic forms) is accordingly filed herewith which includes SEQ ID NOS:66-75. Besides incorporating the additional sequences, the substitute Sequence Listing is updated at identifiers <140> and <141> to refer to the instant application and filing date.

As per the above amendment to the specification, Applicants respectfully request that the presently filed Sequence Listing replace that version which was filed with the Preliminary Amendment and Priority Notice on April 22, 2005. In compliance with 37 CFR 1.825, Applicants submit that the sequence listings presented in the instantly filed paper and electronic forms are identical, and that no new matter is added to this application by submission thereof. It is further noted by Applicants that the information in the instantly filed Sequence Listing is the same as that disclosed in the original specification.

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No fee is believed to be due in relation to this response. However, the Commissioner is hereby authorized to charge any underpayment of fees to Howrey LLP Deposit Account No. 08-3038/12920.0014.PCUS00.

Respectfully submitted,



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